REMARKS

The above amendments and following remarks are submitted in response to the pending Official Action of the Examiner mailed January 4, 2008. Having addressed all objections and grounds of rejection, claims 1-21, being all the pending claims, are now deemed in condition for allowance. Reconsideration to that end is respectfully requested.

The Examiner has objected to Fig. 5 of the drawings. In particular, the third column of the heading of Fig. 5 incorrectly referred to non-existent Fig. 16. As a result, this heading has been changed in the enclosed amended drawing to refer to Fig. 4. Direct support for this amendment may be found in the specification at page 13.

The Examiner has objected to the Specification in view of certain alleged missing definitions of acronyms. In response thereto, page 9, lines 2-64, of the specification has been amended as suggested by the Examiner. The alleged acronym, "ICE" is actually a portion of the term, "Cool ICE" which is the name of a software package and not necessarily an acronym as alleged. Similarly, "CAC" is a coined name for a software package.

The Examiner has objected to claim 3 as containing a typographical anomaly. In response thereto, claim 3 has been amended as suggested by the Examiner. Several other typographical errors have also been addressed in this process.

Claims 1-5 and 11-21 have been rejected under 35 U.S.C. 101 as directed to non-statutory subject matter. In response thereto, independent claims 1, 11, and 16 have been amended as suggested by the Examiner. However, the rejection is respectfully traversed as to originally presented claim 21 as based upon clearly erroneous findings of fact. In rejecting claim 21, the Examiner states:

> (I) As per Claims 1-5 and 21, they are directed to an apparatus, but appear to be comprised of software alone without claiming associated computer hardware required for execution.....

This finding is clearly erroneous as to claim 21, because it specifically recites hardware limitations. Claim element I. is limited by:

> a **user terminal** responsively coupled to a **data base management system** via a **publically accessible digital data communication network** and wherein said first client application is located within said user terminal and said service application is located within said data base management system. (Emphasis added)

Any common definitions of the highlighted terms of this limitation indicate that they are hardware devices. Furthermore, these elements are expressly shown in Fig. 1 of Applicants' disclosure and further discussed at pages 7-8.

Claims 1, 6, 11, and 16 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,051,330, issued to Kaler et al. (hereinafter referred to as "Kaler"). This ground of rejection is respectfully traversed for the

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Examiner to present a *prima facie* case of obviousness as specified by MPEP 2143.

To make a *prima facie* case of obviousness, MPEP 2143 requires the Examiner to provide evidence and argument showing: 1) motivation to make the alleged combination; 2) reasonable likelihood of success of the alleged combination; and 3) all claimed elements within the alleged combination. The Examiner has failed to make any of these three required showings. Therefore, because the Examiner has not made a *prima facie* case of obviousness, Applicants need not and indeed cannot offer appropriate evidence and argument in rebuttal.

The first required showing is that of motivation. Clearly, there is no motivation within Kaler to modify Kaler to operate differently from that specifically taught by Kaler.

Claim 1 has five claimed elements. The Examiner expressly admits that Kaler does not have three of these elements (i.e., elements c, d, and e). Claim 6 has three claimed elements, and the Examiner explicitly admits that Kaler does not have any of these three elements (i.e., elements a, b, and c). Claim 11 has four claimed elements, with the Examiner admitting that Kaler has none of these elements. Similarly, claim 16 has two claimed elements, wherein the Examiner admits that Kaler has neither of these two elements. Thus, even though Kaler admittedly does not teach or suggest 12 of the 14 claimed elements of independent

claims 1, 6, 11, and 16, the Examiner somehow finds Applicants' invention to be obvious in view of Kaler.

In alleging this change to the disclosure of Kaler, the Examiner states in paragraphs 10, 13, 16, and 19 of the pending official action:

> Kaler does not explicitly disclose that the first service request requires input/output and computational activity. However, Kaler does disclose that multi-state functions from clients can be handles by different groups of threads or specially assigned threads (column 5, lines 5-12 & column 10, lines 3-7).

In fact, Kaler says nothing of requested "input/output" or "computational" activity. However, Kaler does teach that all requested activity is performed by the "worker" thread (see Fig. 4). Thus, if Kaler did have requested "input/output" or "computational" activity (which it admittedly does not), it would all be handled by the disclosed "worker" thread.

Completely ignoring the clear teaching of Kaler that all requested activity is performed by the "worker" thread (see Fig. 4), the Examiner states at paragraphs 11, 14, 17, and 20:

> It would have been obvious to one of ordinary skill in the art at the time of invention to have included the activities to be requested be input/output and computational activities in Kaler's invention. One would have been motivated to have the service request comprise these types of activities since (sic) they are common functions which are typically requested by clients upon a service application.

This statement is clearly erroneous and is inadequate as a matter of law, because it ignores the clear teaching of Kaler.

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The second showing required by MPEP 2143 is that of reasonable likelihood of success. The Examiner completely ignores his obligation in this regard. However, he could not do so, because his alleged modifications to Kaler are in opposition to the actual teachings of Kaler.

The third showing required by MPEP 2143 is that all claimed elements are present within the prior art of record. Of course, the Examiner has admitted that Kaler does not contain all of the claimed limitations. Actually, because Kaler does not have the claimed "input/output" or "calculation" activity request, it cannot have the basic structure and operation of the claimed invention.

As summarized in Applicants' Abstract:

> An apparatus for and method of improving the efficiency of service request response activity between multiple clients and multiple service applications within a complex environment. The key to the technique is the use of separate, independent thread pools to maintain I/O and computational activity. A common client key is utilized with both thread pools for a given client service request to ensure the needed coordination.

Because the Examiner has admitted that "Kaler does not explicitly disclose that the first service request requires input/output and computational activity" as claimed, it cannot possibly have the claimed "separate, independent thread pools to maintain I/O and computational activity". Thus, Kaler cannot achieve the efficiencies associated with Applicants' invention.

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Furthermore, the alleged modifications to Kaler (i.e., assumption that a given service request might contain "I/O" activity and "computational" activity) do not remedy this situation as is apparent from examining each of the individual claims, because the processing of a service request in Kaler can only be accomplished in the disclosed "worker" thread. The "receipt" thread and "reply" thread of Kaler do not provide the claimed division of functions which provide the disclosed efficiencies.

Amended claim 1, for example, is an independent apparatus claim having five limiting elements. The Examiner admits that Kaler does not have the third element which reads:

> a first service request requiring **Input/Output activity and computational activity** generated by a first one of said plurality of client applications transferred to said service application; (emphasis added)

Though lacking in motivation as explained above, the Examiner opines that Kaler could have disclosed (but does not) the claimed **"Input/Output activity and computational activity"**.

However, this would not yield the final two claimed elements which read:

> d. a first thread pool responsively coupled to said service application which handles said Input/Output activity of said first service request; and
> e. a second thread pool responsively coupled to said service application which handles said computational activity of said first service request.

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Therefore, the Examiner impermissibly ignores Applicants' claimed invention and states:

> d. a first thread pool responsively coupled to the service application which handles one of the activities of the first service request (column 6, lines 23-24 & column 10, lines 3-7); and
> e. a second thread pool responsively coupled to the service application which handles the second activity of the first service request (column 6, lines 23-24 & column 10, lines 3-7).

These findings are legally irrelevant, because they do not address Applicants' claimed invention. Thus, even if not clearly erroneous, these findings do not support a finding of obviousness, as they do not comply with the third required showing of MPEP 2143 that "all claimed elements are within the alleged combination.

Having made none of the three showings required by MPEP 2143 to present a *prima facie* case of obviousness, the rejection of amended claim 1, ans all claims depending therefrom, is respectfully traversed.

Amended claim 6 is an independent method claim having three steps as limiting elements. The Examiner admits that Kaler has none of the three steps, because Kaler admittedly does not disclose a service request requiring "input/output" activity and "computational" activity. Notwithstanding the Examiner's improper attempt to modify Kaler in a manner which is neither motivated nor possessing a reasonable likelihood of success, the alleged modified Kaler still does not meet the second and third

limiting steps. Therefore, the Examiner impermissibly
paraphrases these steps to make legally irrelevant findings which
ignore the limitations of Applicants' claimed invention. The
rejection of amended claim 6, and all claims depending therefrom,
is respectfully traversed.

Claim 11 is an independent apparatus claim having four
"means-plus-function" limitations. As result, controlling law
requires the Examiner to examine claim 11 in accordance with MPEP
2181-2184. Clearly, he has not done so, because MPEP 2181
requires the Examiner to explicit acknowledge the "means-plus-
function" limitations of claim 11. The rejection of claim 11,
and all claims depending therefrom, is respectfully traversed for
failure of the Examiner to examine the claim in accordance with
controlling law.

Claim 16 is an independent, Jepson-type apparatus claim
having two key improvement limitations. Kaler has neither of
these limitations. Therefore, the Examiner seeks to rewrite
Applicants' claim to more easily fit the Kaler reference. This
is improper as a matter of law. The rejection of amended claim
16, and all claims depending therefrom, is respectfully
traversed.

Claims 2-5, 7-10, 12-15, and 1721 have been rejected under
35 U.S.C. 103(a) as being unpatentable over Kaler in view of U.S.
Patent No. 7,296,190, issued to Vakrat et al (hereinafter

referred to as "Vakrat"). This ground of rejection is respectfully traversed for failure of the Examiner to present a *prima facie* case of obviousness as specified by MPEP 2143.

In an apparent attempt to show motivation to combine Vakrat with Kaler, the Examiner states:

> It would have been obvious to one of ordinary skill in the art at the time of invention to have **used the key in Vakrat's system to identify client applications** in Kaler's invention. One would have been motivated to use this unique key so that the client application and threads are aware of which one of the plurality of service requests they are working o (sic) and for which client the information needs to be returned to.
> (Emphasis added)

This finding is inadequate to establish motivation for a number of reasons.

First, even though the Examiner has found that Kaler handles a service request using a plurality of threads, the finding assumes that Kaler has no capability "so that the client application and threads are aware of which one of the plurality of service requests they are working o (sic) and for which client the information needs to be returned to". If this were true, the Examiner has based his rejection on an inoperative reference (i.e., Kaler). If on the other hand, Kaler already has this capability, there can be no motivation to combine with Vakrat to add a redundant capability.

Second, Vakrat does not disclose "a system that does use a unique key to identify client applications with thread pools" as

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clearly erroneously alleged by the Examiner. The Abstract of

Vakrat states in part:

> A respective **unique identifier is assigned to** each of
> the plurality of computing **devices** for use in
> communicating with the server. (Emphasis added)

The cited "identifier" is a device ID or address. It cannot

uniquely identify client applications as alleged, but can only

uniquely identify the client device as specifically taught by

Vakrat.

Finally, there is no suggestion that Vakrat associates any

particular identifier with a plurality of thread pools, as

alleged by the Examiner, because Vakrat has no plurality of

thread pools.

Again, the Examiner completely ignores his obligation under

MPEP 2143 to provide evidence and/or reasoning to support a

finding of reasonable likelihood of success of the alleged

combination. And again, the Examiner fails to make the required

showing of all claimed elements within the alleged combination as

can be seen by reviewing each of the individual claims.

Claim 2 depends from claim 1 and is further limited by "a

first client key which uniquely identifies said first one of said

plurality of client applications to said first thread pool and

said second thread pool". In addition to the alleged combination

admittedly not disclosing the claimed "first thread pool" and the

claimed "second thread pool", the Examiner admits that Kaler does

not have the further limitation of the claimed "first client key".

Instead, he alleges that Vakrat contains this element. The Examiner states:

> However, Vakrat discloses a system that does use a unique key to identify client applications with thread pools (column 5, lines 3-8).

This finding is both clearly erroneous and unsupported by the cited portion of Vakrat.

Column 5, lines 3-8, of Vakrat actually states:

> Each of the devices 24 receives a unique identifier for communicating with the server 22. Typically, the unique identifier may comprise a unique Internet Protocol (IP) address that is assigned to each of the devices 24 for communicating with the server 22.

Noticeably absent from the citation (and elsewhere in Vakrat as well) is the "client applications" to be identified and the "thread pools" to utilize the identification, as alleged by the Examiner.

The rejection of claim 2 is respectfully traversed as based upon clearly erroneous findings of fact.

Claim 3 depends from claim 2 and is further limited by "a second one of said plurality of client applications generates a second service request transferred to said service application requiring Input/Output activity and computational activity". Instead of addressing Applicants' claimed invention as required by law, the Examiner irrelevantly states:

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As per claim 3, Kaler further discloses a second one of the plurality of client applications generates a second service request transferred to the service application requiring multiple activities (column 5, lines 36-44).

Thus, the Examiner's finding is legally irrelevant, because it does not address Applicants' claimed invention.

The finding is also unsupported by the citation. Column 5, lines 36-44, of Kaler actually states:

FIG. 3 illustrates a block diagram of a computer system in accordance with one embodiment of the present invention.
FIG. 4 illustrates a simplified block diagram of a server that uses multiple conceptual thread pools to service client requests in accordance with on embodiment of the present invention.
FIG. 5 illustrates a state diagram showing a hypothetical function's execution states in accordance with one embodiment of the present invention.

The rejection of claim 3 is respectfully traversed as based upon clearly erroneous findings of fact, legally irrelevant findings which do not address Applicants' claimed invention, and findings which are unsupported by the prior art of record.

Claim 4 depends from claim 3 and is further limited by "a second client key which uniquely identifies said second one of said plurality of client applications to said first thread pool and said second thread pool". The Examiner's ground of rejection is respectfully traversed as clearly erroneous and unsupported by the prior art of record.

Claim 5 depends from claim 4 and further limits the hardware configuration. The alleged combination cannot meet the

limitations of claim 4 from which claim 5 depends, as explained above. Therefore, the alleged combination cannot meet the further limitations of claim 5. The rejection of amended claim 5 is respectfully traversed.

Claim 7 depends from claim 6. Though it contains different limitations from those of claim 2 and does not depend from claim 1 as does claim 2, the Examiner states:

> As per Claim 7, it is rejected for the same reason as Claim 2 above.

The rejection of claim 2 is traversed in accordance with the reasoning provided above. The rejection of claim 7 is respectfully traversed.

Claim 8 depends from claim 7 and is further limited by "wherein said transferring step further comprises transferring said service request to said service application via a publically accessible digital data communication network". In making his rejection, the Examiner cites Fig. 3 of Kaler, which does not show the alleged "publically accessible digital data communication network". The rejection of claim 8 is respectfully traversed as based upon clearly erroneous findings of fact and lack of support from the prior art of record.

Claim 9 depends from claim 8 and is further limited by "a user terminal wherein said client application is located within said user terminal". As explained above, the alleged combination cannot meet the limitations of claim 8 from which claim 9

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depends. Therefore, the alleged combination cannot meet the further limitations of claim 9. The rejection of claim 9 is respectfully traversed.

Claim 10 depends from claim 9 and is further limited by "a data base management system wherein said service application is located within said data base management system". As explained above, the alleged combination cannot meet the limitations of claim 9 from which claim 10 depends. Therefore, the alleged combination cannot meet the further limitations of claim 10. The rejection of claim 10 is respectfully traversed.

Claim 12 depends from claim 11 and is further limited by "means for uniquely identifying said generating means to said first thread pool means and said second thread pool means". It is clear that the Examiner has not examined this "means-plus-function claim in accordance with controlling law, because the Examiner has not provided the acknowledgment required by MPEP 2181. The rejection of claim 12 is respectfully traversed or failure to be examined in accordance with controlling law.

Claim 13 depends from claim 12 and is further limited by "wherein said identifying means further comprises a client key". As explained above, claim 12 from which claim 13 depends has not been examiner in accordance with controlling law. Therefore, the rejection of claim 13 is respectfully traversed.

Claim 14 depends from claim 13 and is further limited by "wherein said honoring means further comprises a data base management system". As explained above, claim 13 from which claim 14 depends has not been examiner in accordance with controlling law. Therefore, the rejection of claim 14 is respectfully traversed.

Claim 15 depends from claim 14 and is further limited by "wherein said generating means further comprises a user terminal". As explained above, claim 14 from which claim 15 depends has not been examiner in accordance with controlling law. Therefore, the rejection of claim 15 is respectfully traversed.

Claim 17 depends from claim 16. Though it contains different limitations from those of claim 2 and does not depend from claim 1 as does claim 2, the Examiner states:

> As per Claim 17, it is rejected for the same reason as Claim 2 above.

The rejection of claim 2 is traversed in accordance with the reasoning provided above. The rejection of claim 17 is respectfully traversed.

Claim 18 depends from claim 17. Though it contains different limitations from those of claim 15 and does not depend from claim 11 as does claim 15, the Examiner states:

> As per Claim 18, it is rejected for the same reason as Claim 15 above.

The rejection of claim 15 is traversed in accordance with the reasoning provided above. The rejection of claim 18 is respectfully traversed.

Claim 19 depends from claim 18. Though it contains different limitations from those of claim 8 and does not depend from claim 6 as does claim 8, the Examiner states:

> As per Claim 19, it is rejected for the same reason as Claim 8 above.

The rejection of claim 19 is traversed in accordance with the reasoning provided above. The rejection of claim 19 is respectfully traversed.

Claim 20 depends from claim 19. Though it contains different limitations from those of claim 14 and does not depend from claim 11 as does claim 14, the Examiner states:

> As per Claim 2, it is rejected for the same reason as Claim 14 above.

The rejection of claim 14 is traversed in accordance with the reasoning provided above. The rejection of claim 20 is respectfully traversed.

Claim 21 is an independent apparatus claim having nine limiting elements. As admitted by the Examiner, the alleged combination does not have the claimed "a first of said plurality of service requests requiring Input/Output activity and computational activity generated by a first one of said plurality of client applications transferred to said service application"

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of claim element c. Therefore, the alleged combination cannot have claim elements d and e. Therefore, the Examiner impermissibly paraphrases Applicants' claim in a manner more easily shown by the prior art of record. As explained above, this is clear error of law.

Furthermore, the Examiner clearly erroneously finds that Vakrat discloses:

> a first client key which uniquely identifies the first one of he plurality of client applications to the first thread pool and the second thread pool;

This statement is clearly erroneous, because Vakrat does not have the claimed "first thread pool" and the claimed "second thread pool".

The rejection of claim 21 is respectfully traversed as based upon clear errors of law and clearly erroneous findings of fact.

Having thus responded to each objection and ground of rejection, Applicant respectfully requests entry of this amendment and allowance of claims 1-21 being the only pending claims.
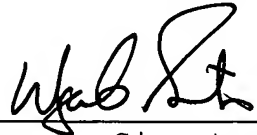
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Respectfully submitted,

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By their attorney,

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